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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,123	01/12/2004	Ralf Gutsche	HSJ920030256US1	3143
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John L. Rogitz Rogitz & Associates Suite 3120 750 B Street San Diego, CA 92101			CHANNAVAJJALA, SRIRAMA T	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/756,123	GUTSCHE, RALF	
	Examiner Srirama Channavajjala	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 March 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Response

1. Claims 1-9 are pending in this application.
2. Claims 10-25 have been cancelled. [1/18/2007].
3. Examiner acknowledges applicant's "response" filed on 3/15/2007.
4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 18 January 2007 has been entered, a non-final office action was mailed on 2/7/2007.
5. Examiner acknowledges applicant's amendment filed on 8/17/2006.
6. Claims, 1,10-11,19,21-25 have been amended [8/17/2006].
7. Claim 20 has been cancelled [8/17/2006].

Drawings

8. The Drawings filed on 1/12/2004 are acceptable for examination purpose.

Information Disclosure Statement

9. The information disclosure statement filed on 09/13/2006 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy enclosed with this office action.

10. The information disclosure statement filed on 1/12/2004 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy was mailed on 08/09/2006

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

As set forth in MPEP 2106(II)A:

Identify and understand Any Practical Application Asserted for the Invention The claimed invention as a whole must accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” State Street, 149 F.3d at 1373, 47USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of “real world” value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600,1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a

computer-readable medium does not make the invention eligible for patenting.

For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some “real world” value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a “useful, concrete and tangible” result to have a practical application.

11. Regarding claim 1, “A graphical user interface (GUI) for configuring pipelines, the GUI displayable on a user computer monitor and stored on a computer memory and comprising:

at least one pipe input set window configured to permit a user to define a type of pipe input set data;

at least one GUI page based on the type, the GUI page being generated by translating the type using a configuration file to a class and using Java reflection to generate an instance of the class, the instance producing the GUI page; and

using the GUI page to configure a data pipeline” is directed to “abstract idea” because all of the elements in the claim 21,31 would reasonably be interpreted by one of ordinary skill in light of the disclosure at page 7, line 18-23, page 8-10, page 13, line 16-22,page 14-, page 16-19,page 21-25 do not have “practical application” because the “final result” by the claimed invention in the claim 1 elements particularly “at least one GUI page based on the type, the GUI page being generated by translating the type

using a configuration file to a class and using Java reflection to generate an instance of the class, the instance producing the GUI page; and using the GUI page to configure a data pipeline" merely software routines or steps related to graphical user interface (GUI) for configuring pipelines, at best, "pipeline" itself treated as "software modules" in relation with the data, furthermore, claim 1, preamble directed to "**GUI displayable on a user computer monitor**" which clearly suggests it may be combination of software and hardware, or merely software per se , do not produce " useful, tangible and concrete" result, therefore, claim 1 is a non-statutory subject matter.

The claimed invention is subject to the test of State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. Specifically State Street sets forth that the claimed invention must produce a "***useful, concrete result.***" In other words 'the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are, at best, functional descriptive material *per se*.

The Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility states in section IV C. 2 b. (2) (on page 21 in the PDF format):

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had "no substantial practical application.").

The examiner reviewed the specification at page 7, line 18-23, page 8-10, page 13, line 16-22, page 14-, page 16-19, page 21-25 but was unable to find a practical real-world use of the result ("at least one GUI page based on the type, the GUI page being generated by translating the type using a configuration file to a class and using Java reflection to generate an instance of the class, the instance producing the GUI page; and using the GUI page to configure a data pipeline")

If the applicant is able to find one and inserts it into the claims provide the location the element is found in the specification.

For "General Analysis for Determining Patent-Eligible Subject Matter", see 101 Interim Guidelines as indicated below:

<<<http://www.uspto.gov/web/offices/pac/dapp/ogsheets.html>>>

see MPEP 8th edition, Rev 5, Aug 2006

No new matter should be entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. ***Claims 1-9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Blaszczak et al [hereafter Blaszczak], US Publication No. 2004/0186915 filed on March 18, 2003 in view of Yamamoto et all. [hereafter Yamamoto], US Patent No. 6311151.***

13. As to claim 1, Blaszczak teaches a system which including 'a graphical user interface (GUI) for configuring pipelines [Abstract, page 5, col 1, 0066], Blaszczak specifically teaches data transformation pipeline or DTP that enables a user to define, describe data transformation functionality via graphical user interface (GUI) as detailed in page 5, col 1, 0066; pipelines corresponds to Blaszczak's data transformation pipeline or DTP fig 6A, element 302; GUI corresponds to fig 6A, element 304; 'the GUI displayable on a user computer monitor and stored on a computer memory' [see fig 1, fig 2A, page 2, col 2, 0037], Blaszczak specifically suggests computer monitor [see fig 1, fig 2A] and computer memory [page 2, col 2, 0037]; at least one pipe input set window configured to permit a user to define a type of pipe input set data' [page 5, col 1, 0066, line 12-17, 0067, line 1-11], Blaszczak

specifically teaches user inputs data via graphical user interface related to predefined data;

at least one GUI page based on the type, the GUI page being generated by translating the type using a configuration file to a class and, the instance producing the GUI page' [page 6, col 2, 0078], Blaszcza specifically teaches translator/optimizer functionality i.e., this translator functionality is integral part of the "data transformation pipeline" [see fig 6A], also it allows users to define complex data transformation via GUI interface; 'using the GUI page to configure a data pipeline' [page 6, col 2, 0081].

It is however, noted that Blaszcza does not specifically teach 'Java reflection to generate an instance of the class', although Blaszcza suggests transformation functionality related to pipeline can be developed on variety of platforms that including Java, Active X etc.[Blaszcza: page 2, col 1, 0017, page 6, col 1, 0075]. On the other hand, Yamamoto teaches 'Java reflection to generate an instance of the class' [col 5, line 56-60], Yamamoto specifically teaches Java reflection API , typically reflection API allows Java code to examine classes and objects at run time, further reflection classes allow to call another class methods dynamically at run time, therefore, reflection API represents the classes, interfaces and objects in the current Java is common knowledge in Java environment.

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Yamamoto into scheduling data flow execution based on data transformation pipeline of Blaszcza because both

Blaszcak and Yamamoto directed to GUI based software modules, more specifically Blaszcak directed to data transformation pipeline enables user to develop complex data transformation by graphically describing and representing via GUI [see Abstract]; also Blaszcak suggests pipeline using translators to translate the graphical data into DFE plan [page 5, col 1, 0067], while Yamamoto directed to GUI based Java programming to translate text or data, more specifically Java-related tools are used to create effectively translate files particularly Java Bean components defining classes, functions relies on core reflection API [col 5, line 52-67].

one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Yamamoto into scheduling data flow execution based on data transformation pipeline of Blaszcak because that would have allowed users of Blaszcak to implement "java reflection API" using Bean information class, properties, also allows users to create customization of at design time [col 5, line 66-67, col 6, line 1-7], further bringing the advantages of interactively translate data, thus expense of translation verification testing is reduced or eliminated as suggested by Yamamoto [col 3, line 13-18].

14. As to claim 2, Blaszcak disclosed 'at least the pipe input set window and GUI page require no programming apart from an initial core code' [page 6, col 2, 0082].

15. As to claim 3, Blaszczak disclosed 'wherein the GUI is an incremental GUI wherein GUI pages for new pipe components can be added incrementally without changing existing code' [page 7, 0082, col 1, line 4-15].
16. As to claim 4, Blaszczak disclosed 'wherein at least one new pipe module is based on a pre-existing module type' [page 1, col 2, 0009].
17. As to claim 5, Blaszczak disclosed 'wherein at least one new pipe module is based on a new user-defined component type' [page 4, col 1, 0051].
18. As to claim 6, Blaszczak disclosed 'wherein the GUI defines a set of interfaces, each interface including plural functions' [page 5, col 2, 0069-0073], the GUI including a GUI representation part and a storage part, the GUI representation part defining how something is displayed and the storage part defining how GUI parameters are stored in an external storage' [page 4, col 1, 0053; page 6, col 2, 0081].
19. As to claim 7, Blaszczak disclosed 'at least one Pipe Output Set tab for defining PipeOutputSet representative of a type of output data from the pipeline' [page 6, col 2, 0080].

20. As to claim 8, Blaszcza disclosed 'at least one Storage for TupleSets tab for defining an arbitrary number of elements contained in a StorageForTupleSets component of the pipeline, individual input and output sets being definable for each element in the component' [page 6, col 2, 0078].

21. As to claim 9, Blaszcza disclosed 'at least one Pipe Modules tab for defining an arbitrary number of PipeModules of the pipeline, a type being selected for each PipeModule using the tab, the type defining at least in part the GUI' [Abstract, page 1, 0007]

Response to Arguments

22. Applicant's arguments filed on 3/15/2007 with respect to claims 1-9 have been fully considered but they are not persuasive, for examiner's response, see discussion below:.

a) At page 1-2, claim 1, applicant argues that it utterly fails to explain why a GUI, much less one that is explicitly disclosed to be displayed on a computer monitor for configuring a useful, tangible and concrete data pipeline, lacks a practical application.....

As to the argument [a] above, the preamble]is directed to "a graphical user interface (GUI) for configuring pipelines, the GUI displayable on a user computer monitor and stored on a computer memory and comprising" however, it is noted that

specification does not teach “computer-storage medium” of any kind including drawing fig 1- 21. although fig 1, merely, showing element 16 pipemodeule 1...M processing, element 18 is storage ... further, the steps “at least one pipe input set window...”, “at least one GUI page based....”, “using the GUI page to configure a data pipeline” is appears to be routines or steps related to “data structure” would reasonably be interpreted by one or ordinary skill in light of the disclosure at page 7, line 18-23, page 13, line 16-22, page 14, page 16-19, page 21-25, and it appears to be merely manipulating data structure using object oriented configuration file, but fails to produce “real-world” output that is useful. If the applicant is able to find one and inserts it into the claims provide the location of the element is found in the “***specification***”

Therefore, applicant's remarks at page 1-2 are deemed not to be persuasive, and claims 1-9 are rejected under 35 USC 101.

b) page 2, claim 1, applicant argues that ref(a), the relied upon portions state nothing at all about defining an input set data type as claimed.

As to the above argument [a], as best understood by the examiner, firstly, Blaszczak is directed to data flow execution, more specifically data flow executions or DFEs by “pipeline” data flowing from one sources to more than more target or destinations through various interconnected odes as detailed in [see Abstract], secondly, Blaszczak specifically teaches “graphically describing” functions that defines

and describes “transformation pipeline” [see page 1, 0009], thirdly, “data transformation pipeline or DTP” allows users to define, describe “data transformation” functionality using “graphical user interface or GUI” as detailed in page 5, col 1, 0066, examiner interpreting pipeline[s] corresponds to Blaszczak’s data transformation pipline or DTP as detailed in fig 6A, element 302, and graphical user interface or GUI corresponds to Blaszczak’s GUI fig 6A, element 304

- b) At page 2, claim 1, applicant argues that the relied upon portion of paragraph 67 is of no further avail, because it too fails to state anything about defining a type for an input data set.

As to the argument [b], examiner disagree with the applicant because, Blaszczak is specifically teaches “program modules” including routines, programs, objects, components, data structures and performing specific tasks or implement particular abstract data types [page 2, col 2, 0036, line 7-10], further it is also noted that Blaszczak also suggests database particularly defining objects, API, stored procedures and like used in “configuration” of tasks [page 4, col 1, 0054], furthermore, Blaszczak’s one of the layer specifically provides monitoring, controlling based events is part of extract-transform-load tool [ETL], therefore, Blaszczak user input data via graphical user interface related to pipe input as detailed in page 5, col 1, 0066, line 12-17, 0067, line 1-11.

- c) At page 3, claim 1, applicant argues that “Nothing in para 78 implicates a type of an input data set, much less to use the type of produce a GUI, much less still in the particular way claimed.

As to the above argument [c], as best understood by the examiner, Blaszcak specifically teaches graphical user interface or GUI that allows not only functions related to “translator/optimizer”, but also ensures consistent functionality of “pipelining data” [page 6, col 2, 0078], therefore, at minimum, Blaszcak teaches “translating “ function while maintaining consistent functionality of “pipeline”.

- d) At page 3, claim 1, applicant argues that “in contrast, claim requires using “Java reflection” for something entirely different and, hence, unsuggested by ref (b), namely, generating an instance of a class of a type of pipe input set data.

As to the above argument [d], as best understood by the examiner, it is noted Blaszcak suggests not only GUI pipeline ie., data transformation pipeline that allows data transformation functionality by graphically describing and representing a desired data [see Blaszcak: Abstract], also Blaszcak suggests transformation functionality related to pipeline can be developed on variety of platforms that including “Java, Active X and like [see Blaszcak: page 2, col 1, 0017, page 6, col 1, 0075]. It is also noted that typical “Java programming language” provides both “reflection and method

invocation”, further reflection allows a program to inspect itself and its runtime environment is common knowledge in the art.

It is however, noted that Blaszcak does not specifically disclose “Java reflection”. On the other hand, Yamamoto et al. is directed to performing contextual software translations, more specifically, “translation tool” that supports “real application GUI” and “translation test GUI” as detailed in Abstract, fig 6. Yamamoto also teaches Java reflection API that generate an instance of the class[s] [see Yamamoto: col 5, line 56-60]. It is also noted that Java reflection or Java core reflection API provides a small, type-safe and secure API that supports classes and objects in the Java environment. Typically “reflection API” allows Java code to examine classes and objects at run time, further reflection classes allow to call another class methods dynamically at run time, therefore, at minimum, “reflection API” represents the classes, interfaces and objects in the current Java is also common knowledge in Java environment.

Therefore, one of the ordinary skill in the art at the time of applicant’s invention to incorporate the teachings of Yamamoto into scheduling data flow execution based on data transformation pipeline of Blaszcak because that would have allowed users of Blaszcak to implement “java reflection API” using Bean information class, properties, also allows users to create customization of at design time [col 5, line 66-67, col 6, line 1-7], further bringing the advantages of interactively translate data, thus expense of translation verification testing is reduced or eliminated as suggested by Yamamoto [col 3, line 13-18].

- e) At page 4, claim 2, applicant argues it appears to be incorrect that ref (a) para 82 teaches a pipe input set window and GUI.....

As to the argument [e], as best understood by the examiner Blaszczak suggests pipeline engine of the scheduler would build from the component library is part of pipe input set window and GUI as detailed in fig 7B page 6, 0082.

- f) At page 4, claim 3-6, it is noted that applicant's remarks are merely conclusory statements, without any support. Applicant is merely repeating the language of the claim, without addressing examiner's particular interpretation of the reference as presented in the previous office action. In response to claim 3-6 remarks in the present office action, as best understood by the examiner, at least claims 3-5, Blaszczak specifically suggests extracting component data to extract required data from the external source related through GUI and incorporating various functions such as dividing, sorting of data destinations by loading components as detailed in page 7, 0082.

- g) At page 4, claim 6, applicant argues that it appears to be incorrect that ref (a) para 53 and 81 teach the GUI includes a GUI representation part and a storage part...

As to the argument [g], as best understood by the examiner Blaszczak specifically teaches graphical user interface defining various functions for example extracting data, data transformation, splitting data, merging and like as detailed in page 5, col 2, 0069-0073, further, Blaszczak also teaches both input and output devices in relation with data transformation pipeline and GUI have the capability not only defining various functions and parameters, but also displaying data, [fig 6A, element 304] and storage part [fig 6A element 380, page 4, 0053 and page 6, 0081]

- h) At page 5, claim 7, applicant argues that the allegation appears to be incorrect that ref (a) para 80 teaches a tab for defining a set representative of a type.....

As to the above argument [h], as best understood by the examiner, Blaszczak specifically teaches data accessing and manipulating without copying the data to other locations page 6, 0080], further Blaszczak also suggests both input and out related to graphical user interface graph data in data transformation pipeline [fig 1] and data flow execution suggests outputting the data from the pipeline i.e., data transformation specified via GUI as detailed in fig 7A .

- i) At page 5, claim 8, applicant argues that the allegation appears to be incorrect that ref (a) para 78 teaches a tab for defining an arbitrary number of elements.....

As to the argument [I], as best understood by the examiner, Blaszczak specifically teaches translator/optimizer along with other functions via the GUI interface related to pipelining data through data transformation functionality or DFE supporting Graph data from GUI and buffer to store [page 6, 0078] defining specific input and output tabs [0078].

- j) At page 5, claim 9, applicant argues that the allegation appears to be incorrect that ref (a) para 7 teaches a tab for defining an arbitrary number of modules of the pipeline.....

As to the above argument [j], as best understood by the examiner, Blaszczak specifically teaches data flow executions and various other transformation functions by graphically describing, representing via graphical user interface [see Abstract], further, it is also noted that typical program modules including routines, programs, objects and other data structure defined in the data transformation pipeline [page 1, 0007, page 2, 0036, fig 1].

Conclusion

The prior art made of record

- a. US Publication. No. 2004/0186915
- b. US Patent No. 6311151

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

sc
SC
Patent Examiner.
May 11, 2007.

[Signature]
SRIRAMA CHANNAVAJJALA
PRIMARY EXAMINER